

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT & ONE POINT BACK PRESSURE TEST FOR GASWELL

Form C-122
 Revised 9-1-65

RECEIVED

MAY 28 1982

O. C. D.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-7-82	
Company Yates Petroleum Corporation ✓				Connection Transwestern Pipeline Co.	
Well Millman Strawn				Formation Strawn	
Completion Date 3-4-82		Total Length 11280		Plug Back TD 10465 KB	
Elevation 3550 KB		Form. or Lease Name North Millman Unit		Well No. 3	
Casing Size 4 1/2"	Wt. 11.6#	Set At 4.000	11280	Perforations: From 9690 To 10079 KB	Unit Sec. Twp. Rge. K 8 19S 28E
Log Size 2-3/8	Wt. 4.7#	Set At 1.995"	10145	Perforations: From To	County Eddy
Type Well - Single - Fractionhead - G.G. or G.O. Multiple Single				Factor Set At 9634 KB	
Producing Tube Tubing		Reservoir Temp. °F 160 @ 10000		Mean Annual Temp. °F 62	
L 9885		H 9885		Gg 1.135	
% CO ₂ 0.69		% N ₂ 2.91		% H ₂ S Nil	
Prover -		Meter Run 2"		Flngd Flngd	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
51							2265	89			wks
1.	2.067x1.000			450	2.2	60	1295	93			21 hrs
2.	2.067x1.000			460	4.5	66	710	94			24 hrs
3.	2.067x1.000			460	6.0	69	480	95			24 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Compress. Factor, Fpv	Rate of Flow O. Field
1	4.946	31.92	463.2	1.000	1.175	1.056	196
2	4.946	46.15	473.2	0.9943	1.175	1.056	282
3	4.946	53.28	473.2	0.9915	1.175	1.055	324
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.693	520	1.333	0.8965	6.556	52	0.724	1.135	668	390
2.	0.708	526	1.349	0.8962						
3	0.708	529	1.356	0.8980						
4.										
5.										

$P_r = 3960.2$ $P_w^2 = 15683$				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0483$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0361$	
NO.	P _r	P _w	P _w ² - P _r ²				
1			7963				
2			3303				
3			723				
4							
5							

Absolute Open Flow 336 MCF @ 14.7 PSIA				Angle of Slope θ 53 deg		Slope, n 0.7516	
Remarks: Pressures by dead weight tester. (BHP compares w/extrapolation from earlier BHP build up by Bennett Wireline.) Calculations worksheet C-122D Attached.							
Approved by:		Conducted By:		Calculated by:		Checked By:	
		Bill Trembley Jr.		Eddie Mahfood			